REMARKS

Claims 1-14 and 21-27 are pending. By this Amendment, claims 1, 8, 21, and 25 are amended. Support for the amendments can be found throughout the specification, for example, at page 3, lines 1-15, page 4, lines 15-31, page 8, line 17-page 11, line 9, and page 22 in its entirety. The amendments to the claims do not introduce new matter.

Claim of Priority

The Examiner asserted that the provisional application upon which priority is claimed fails to provide adequate support under 35 U.S.C. 112 for claims 1-14 and 21-27 of the instant application. However, it is well established that priority claims under sections 119 and 120 are evaluated on a claim by claim basis. The evaluation of the particular priority date of a claim need only be considered under circumstances in which there is an intervening reference with a critical date between the actual filing date and the date of a priority claim. This issue is moot until such a reference becomes of record. See, for example, the discussion in the context of a foreign priority claim under 35 U.S.C. 119 in MPEP 201.15. Therefore, Applicants do not presently consider this issue further.

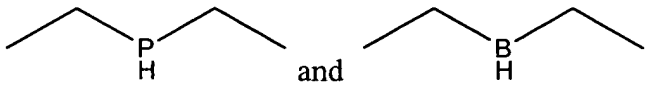
Objections to the Disclosure

The Examiner objected to the amended paragraph beginning at page 21, line 12, of the specification, set forth in the amendment filed on September 8, 2006, disclosing that the solubilizing substituent comprises a $-(CH_2)_nH$ group where n is an integer between 1 and 50 and one or more of the methylene groups can be replaced by B or P. The Examiner indicated that it is not clear how a methylene group, which is divalent, can be replaced with groups that are not divalent. Further the specification also discloses that the solubilizing substituent comprises a $-(CH_2)_nH$ group where n is an integer between 1 and 50 and one or more of the methylene groups can be replaced by B or P. Attention was directed to the amended paragraphs beginning at page 3, line1; page 8, line 21; and page 20, line 23 of the specification set forth in the amendment filed

on March 16, 2006. The Examiner indicated that it is not clear how a methylene group, which is divalent, can be replaced with groups that are not divalent.

Further, the Examiner noted that the instant specification discloses that one of the methylene groups in the group $-(CH_2)_nH$ can be replaced by N, C, B, Si, P, or a "CR_b group". The Examiner then noted that the instant specification at page 10, lines 22-24, states that the term group indicates that the generically recited chemical entity may have any substituent thereon which is consistent with the bond structure of that group...no substitution would include within the term that would alter the fundamental bond structure of the underlying group. The Examiner asserted that, thus, B and P cannot be substituted "in such a way as to provide the appropriate number of bonds" as asserted by applicants, because the substitution would alter the fundamental bond structure of B and P.

However, the list of possible replacements for a methylene group includes, "O, S, B, P, C=O, O=S=O, a heterocyclic group, an aromatic group, a CR_cR_d group, or a SiR_eR_f..." It is noted that the list is not for "an O group, an S group, a B group...." The term "group" is not used in association with these possible substitutions, hence these possible substitutions are not bound to any restrictions associated with the definition of a "group". Therefore, B and P could be substituted in such a way as to provide the appropriate number of bonds. One of ordinary skill in the art would recognize that the substitutions would be inserted in the methylene chain in such a way as to provide the appropriate number of bonds. Further, it is well understood in the chemical arts that the appropriate number of hydrogen atoms are added to a structure using understood chemical notation to fill-in the structure. For example, the structures



are understood to have carbon atoms at the joining points, unless otherwise designated with another atom, and that all empty positions are filled with hydrogen atoms. A further example is provided in an attachment (Attachment 1), where not all carbon and hydrogen atoms are specifically shown in the structure, but one skilled in the art understands that the relevant positions are occupied by carbon atoms and the bonding positions on the carbon are filled either with a bond or with a hydrogen atom.

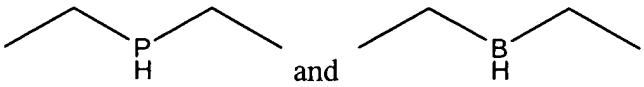
Further, the use of the CHEMDRAW® program and database will provide the above structure (containing either P or B) and will note if there is an invalid valence. The inclusion of hydrogen bonded to the B or P removes any such notation. In addition, double bonds may be added to accommodate the particular valence. The CHEMDRAW® program will and does insert a hydrogen atom when needed, for example, when a double bond is removed, or in the case of P having two double bonds. For example, in Attachment 2, the placement of "B" in the chain results in a message indicating an invalid valence, however the addition of a double bond (Attachment 3) removes the message. Further, if the double bond is removed (Attachment 4), the CHEMDRAW® program automatically inserts a hydrogen atom. A similar example is provided using a "P" atom in the chain (Attachments 5-8), where an initial invalid valence message appears, and is removed upon the addition of 1 or 2 double bonds. In the example of the structure having 1 double bond, when the double bond is removed (Attachment 7), the CHEMDRAW® program automatically inserts a hydrogen atom. Thus, those skilled in the art would be familiar with the notion of supplying the appropriate number of bonds or hydrogen atoms, when necessary, as noted in the use of the CHEMDRAW® program.

Hence, as long as the noted methylene replacement is at least double valent, the portions remaining can be appropriately substituted based on the liberal substitution defined in the specification. Based upon the above comments, reconsideration and withdrawal of the objection to the disclosure are respectfully requested.

Rejection Under 35 U.S.C. §112, Second Paragraph

The Examiner rejected claims 1-14 and 21-27 under 35 U.S.C. 112, second paragraph, as being indefinite. The Examiner asserted that instant claims 1, 8, and 21 are indefinite in the phrase "the solubilizing substituent comprises a $-(CH_2)_nH$ group where n is an integer between 1 and 50, and one or more of the methylene groups is optionally replaced by a ...B, P..." because it is not clear how a methylene group, which is divalent, can be replaced with groups that are not divalent. Similarly, the Examiner asserted that claim 25 is further indefinite in the phrase "R_7 comprises a $-(CH_2)_nH$ group where n is an integer between 1 and 50, and one or more of the methylen groups is optionally replaced by a ...B, P..." because it is not clear how a methylene group, which is divalent , can be replaced with groups that are not divalent.

The list of possible replacements for a methylene group includes, "O, S, B, P, C=O, O=S=O, a heterocyclic group, an aromatic group, a CR_cR_d group, or a SiR_eR_f..." It is noted that the list is not for "an O group, an S group, a B group...." The term "group" is not used in association with these possible substitutions, hence these possible substitutions are not bound to any restrictions associated with the definition of a "group". Therefore, B and P could be substituted in such a way as to provide the appropriate number of bonds. One of ordinary skill in the art would recognize that the substitutions would be inserted in the methylene chain in such a way as to provide the appropriate number of bonds. Further, it is well understood in the chemical arts that the appropriate number of hydrogen atoms are added to a structure using understood chemical notation to fill-in the structure. For example, the structures



are understood to have carbon atoms at the joining points, unless otherwise designated with another atom, and that all empty positions are filled with hydrogen atoms. A further example is provided in an attachment, where not all carbon and hydrogen atoms are specifically shown in the structure, but one skilled in the art understands that the relevant positions are occupied by carbon atoms and the bonding positions on the carbon are filled either with a bond or with a hydrogen atom.

Further, the use of the CHEMDRAW® program and database will provide the above structure (containing either P or B) and will note if there is an invalid valence. The inclusion of hydrogen bonded to the B or P removes any such notation. In addition, double bonds may be added to accommodate the particular valence. The CHEMDRAW® program will and does insert a hydrogen atom when needed, for example, when a double bond is removed, or in the case of P having two double bonds. For example, in Attachment 2, the placement of "B" in the chain results in a message indicating an invalid valence, however the addition of a double bond (Attachment 3) removes the message. Further, if the double bond is removed (Attachment 4), the CHEMDRAW® program automatically inserts a hydrogen atom. A similar example is provided using a "P" atom in the chain (Attachments 5-8), where an initial invalid valence message appears, and is removed upon the addition of 1 or 2 double bonds. In the example of the structure having 1 double bond, when the double bond is removed (Attachment 7), the

CHEMDRAW® program automatically inserts a hydrogen atom. Thus, those skilled in the art would be familiar with the notion of supplying the appropriate number of bonds or hydrogen atoms, when necessary, as noted in the use of the CHEMDRAW® program.

Hence, as long as the noted methylene replacement is at least double valent, the portions remaining can be appropriately substituted based on the liberal substitution defined in the specification. Based upon the above comments, reconsideration and withdrawal of the rejection of claims 1-14 and 21-27 are respectfully requested.

Rejection Under 35U.S.C. §112, First Paragraph

The Examiner rejected claims 1-14 and 21-27 under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement. The Examiner asserted that instant claims 1, 8, 21, and 25 recite that in the charge transport compound formula, the symbol X is "a p-N,N-diphenylaminophenylene group." The Examiner asserted that the originally filed specification, at page 22, exemplifies two particular charge transport compounds that are represented by the chemical formulas recited in instant claims 1, 8, 21, and 25, when the symbol X is p-N,N-diphenylaminophenylene. The Examiner asserted that the term "a p-N,N-diphenylaminophenylene group" is broader that the disclosed p-N,N-diphenylaminophenylene moiety because it encompasses substituted p-N,N-diphenylaminophenylene groups.

Section 112, first paragraph, does not require a test or an example with every species covered by a claim. Courts have consistently held that patent applicants may use generic claim language utilizing generic chemical formulae.

> "To require such a complete disclosure would apparently necessitate a patent application or applications with "thousands" of examples or the disclosure of "thousands" of catalysts along with the information as to whether each exhibits catalytic behavior resulting in the production of hydroperoxides...[S]uch a requirement would force an inventor seeking adequate patent protection to carry out a prohibitive number of actual experiments. This would tend to discourage inventors from filing patent applications in an unpredictable area since the patent claims would have to be limited to those embodiments which

are expressly disclosed." *In re Angstadt*, 537 F.2d 498, 190 U.S.P.Q. 214, (CCPA 1976).

Further, the court in *In re Vaeck* reiterated this notion of not limiting claims to those embodiments that are expressly disclosed, "...we do not imply that patent applicants in art areas currently denominated as "unpredictable" must never be allowed generic claims encompassing more than the particular species disclosed in their specifications. It is well settled that patent applicants are not required to disclose every species encompassed by their claims, even in unpredictable art." *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991) citing *In re Angstadt*, 537 F.2d 498, 502-503, 190 USPQ 214, 218 (CCPA 1976). In addition, the court indicated as to the examples provided in the specification that "...there is no magical relation between the number of representative examples and the breadth of the claims..." *In re Borkowski*, 57 CCPA 946, 952-53, 422 F.2d 904, 910, 164 USPQ 642, 646 (1970).

As noted in the specification, for example at page 3, lines 7-8, and page 4, lines 15-31, X comprises an arylamine group such as a p-(N,N-disubstituted)arylamine group, and a p-N,N-diphenylaminophenylene group is a type of p-(N,N-disubstituted)arylamine group. In addition, in the claims (e.g. claims 1, 8, 21, and 25) X comprises an arylamine group, not an arylamine moiety. The term "moiety" was purposefully not used in association with the value for X, instead the term "group" was used. Hence, as noted at page 10, line 18 – page 11, line 9, the term "group" allows for substituents thereon, that is, for substitutions on the arylamine. If the term moiety had been used then it would have restricted the chemical structures to unsubstituted structures. Therefore, "group" was used, and the use of the term "group" allows for substitutions on the arylamines representing X.

Further, the examples presented on page 22 of the specification are presented as *non-limiting examples*. Other examples within the general structure of the present invention are contemplated. Further, based on comments made above, the claims are not required to be limited to those embodiments that are expressly disclosed. Claims can encompass more than the particular species expressly disclosed in the specification. Therefore, although the specification provides examples of chemical structures showing an unsubstituted p-N,N-diphenylaminophenylene, the claims can encompass more than just that species. Further, it is noted that structure (3) and structure (4) on page 22 show additional examples, and these

examples demonstrate substituted arylamines for X. Clearly, substituted arylamines for X were contemplated, demonstrated and claimed. Therefore, reconsideration and withdrawal of the rejection of claims 1-14 and 21-27 are respectfully requested.

Rejection Under 35 U.S.C. 103(a) over U.S. Patent No. 4,415,640 to Goto et al.

The Examiner rejected claims 1, 21 and 25 under 35 U.S.C. 103(a) as being unpatentable over U.S. 4,415,640 to Goto et al. ("Goto" or "'640"). The Examiner asserted that Goto ('640) discloses an electrophotographic organic photoreceptor comprising an electrically conductive substrate and a light-sensitive layer comprising a charge generating material and a charge transport material represented by Formula I described at col. 3, lines 20-42. The Examiner further asserted that Goto ('640) discloses charge transport compounds represented by compounds (6) to (8) at col. 4, of Goto ('640) and that compounds (6) to (8) meet the limitations of the formula recited in instant claims 1, 21, and 25, except for the 9-fluorenylidene group comprising a substituent as recited in the instant claims. The Examiner asserted that Goto ('640) discloses that compounds (6) to (8) represent Formula (I), and Goto discloses that both benzene rings in the 9-fluorenylidene group are substituted with the groups X and Y, where the X and Y groups can each be hydrogen, a halogen, an alkyl preferably having from 1 to 8 carbon atoms (and more preferably 1-4 carbon atoms), an amino or a substituted amino group, or an alkoxy preferably having 1-8 carbon atoms (and more preferably having 1-4 carbon atoms). Col. 3, lines 43-47, and compounds (9), (10) and (12) at col. 5 of Goto ('640). Further, the Examiner asserted that the Goto ('640) compounds (6) to (8) meet the substituted 9-fluorenylidene limitation of the instant claims when one of the benzene rings in the 9-fluorenylidene group in compounds (6) to (8) is substituted with an alkyl having 1 to 8 carbon atoms or an alkoxy having 1 to 8 carbon atoms. The Examiner asserted that the alkyl having 1 to 8 carbon atoms meets the substituent $-(CH_2)_nH$, when n is an integer of 1 to 8 and the alkoxy having 1 to 8 carbon atoms such as OCH_3, meets the substituent $-(CH_2)_nH$ when n is 2-9, and the first methylen group is replaced with –O-.

The Examiner then concluded that "[i]t would have been obvious for a person having ordinary skill in the art, in the view of the teachings of Goto, to substitute one of the hydrogen

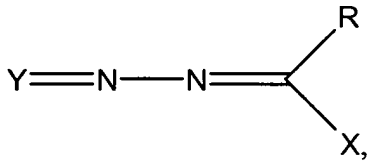
atoms on one of the benzene rings in the 9-fluorenylidene group in the Goto compounds (6) to (8) with an alkyl having 1 to 8 carbon atoms or an alkoxy having 1 to 8 carbon atoms...."

This rejection is respectfully traversed. Independent claims 1, 21 and 25 have been amended to more particularly point out the claimed invention. Hence, Goto ('640) does not render Applicants' invention, as presently claimed in independent claims 1, 21, and 25, prima facie obvious.

Compounds (6) to (8) of Goto ('640) comprise a p-N,N-diphenylaminophenylene group at one end of the compound. Additionally, Formula (I) discloses the groups X and Y, where the X and Y groups can each be hydrogen, a halogen, an alkyl preferably having from 1 to 8 carbon atoms (and more preferably 1-4 carbon atoms), an amino or a substituted amino group, or an alkoxy preferably having 1-8 carbon atoms (and more preferably having 1-4 carbon atoms).

The claims have been amended such that the subtituent(s) on the 9-fluorenylidene group cannot be an alkoxy moiety or an alkyl moiety. Goto ('640) discloses that the groups X and Y can be an alkyl or an alkoxy. Significantly, Goto ('640) does not use the term "group" with the alkyl or alkoxy terms, but does use the term "group" when describing the "*substituted* amino group" (emphasis added). Further, the exemplified compounds provided in Goto ('640) do not show a substituted alkyl or alkoxy. The instant specification at page 10, lines 22-29 notes that the term group indicates that the generically recited chemical entity may be substituted. Therefore, Goto ('640) does not teach or suggest a compound where the solubilizing substituent comprising a $-(CH_2)_nH$ group of the 9-fluorenylidene group of Y can be an alkoxy group or an alkyl group.

As presently claimed in independent claims 1, 21, and 25, the charge transport material has the formula



where Y comprises a 9-fluorenylidene group having at least a solubilizing substituent, wherein the solubilizing substituent comprises a $-(CH_2)_nH$ group where n is an integer between 1 and 50, and one or more of the methylene groups is optionally replaced by O,...a CR_cR_d group, or a SiR_eR_f where R_c, R_d, R_e, and R_f are, each independently, H, a hydroxyl group, a thiol group, a

carboxyl group, an amino group, an alkyl group, an alkoxy group, an alkenyl group, a heterocyclic group, or an aromatic group, or part of a ring group, however the solubilizing substituent is not an alkyl moiety or an alkoxy moiety. Because Goto ('640) does not teach or suggest the claimed charge transport materials, reconsideration and withdrawal of the rejection of claims 1, 21, and 25 under 35 U.S.C. § 103(a) as being unpatentable over U.S. 4,415,640 (Goto) are respectfully requested.

Claim Rejections Under 35 U.S.C. 103(a) Over U.S. Patent 5,430,526 to Ohkubo Combined With Goto ('640)

The Examiner rejected claims 7, 8, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. 5,430,526 to Ohkubo et al. combined with Goto ('640). More specifically, the Examiner asserted that the '526 patent "discloses an electrophotographic image forming apparatus comprising all the components recited in instant claims 8, and 14, but for the particular photoreceptor." The Examiner asserted that the photosensitive drum of Ohkubo ('526) meets the drum limitation recited in instant claim 7. Additionally, the Examiner noted that Ohkubo ('526) "does not disclose the use of the photoreceptor recited in the instant claims." The Examiner asserted that it would have been obvious to use the photosensitive layer rendered obvious over the disclosure of Goto ('640) as the photosensitive layer on the conductive drum in the apparatus disclosed by Ohkubo ('526).

The rejection is respectfully traversed. The combination of Ohkubo ('526) and Goto ('640) does not render Applicants' invention, as presently claimed in independent claims 1 and 8, prima facie obvious. Reconsideration of the rejection based on the following comments is respectfully requested.

As discussed above, Compounds (6) to (8) of Goto ('640) comprises a p-N,N-diphenylaminophenylene group at one end of the compound. Additionally, Formula (I) discloses that X and Y each can be a hydrogen, a halogen, an alkyl (preferably one having 1 to 8, and more preferably, 1 to 4 carbon atoms), an alkoxy (preferably one having 1 to 8, and more preferably 1 to 4 carbon atoms), amino or a substituted amino group.

As such, Goto ('640) does not teach or suggest a compound where X or Y comprises a $-(CH_2)_nH$ group on the 9-fluorenylidene group, and where n is an integer between 1 and 50, and

one or more of the methylene groups is optionally replaced by O, ... a CR_cR_d group, or a SiR_eR_f where R_c, R_d, R_e, and R_f are, each independently, a bond, H, a hydroxyl group, a thiol group, a carboxyl group, an amino group, an alkyl group, an alkoxy group, an alkenyl group, a heterocyclic group, an aromatic group, or part of a ring group, but not an alkyl moiety or an alkoxy moiety.

Thus, Goto ('640) does not disclose or suggest all of the elements as presently claimed in independent claims 1 and 8. Additionally, since Ohkubo ('526) alone or in combination with Goto ('640) does not disclose or suggest the use of the claimed change transport materials, Ohkubo ('526) does not make up for the deficiencies of Goto ('640). Because the combination of Ohkubo ('526) and Goto ('640) does not disclose or suggest all of the claim limitations of independent claims 1 and 8, the combination of Ohkubo ('526) and Goto ('640) does not render independent claims 1 and 8, prima facie obvious. If an independent claim is nonobvious under 35 U.S.C. 103 then any claim depending therefrom is nonobvious. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988). Claims 7 and 14 depend from claim 1 and claim 8, respectively and are therefore also nonobvious. Reconsideration and withdrawal of the rejection of claims 7 and 14 as being unpatentable over Ohkubo ('526) combined with Goto ('640).

Rejection of Claims Under 35 U.S.C. 103(a) over Goto ('640) and Ohkubo ('526)

The Examiner rejected claims 4 and 24 as being unpatentable under 35 U.S.C. 103(a) over Goto ('640) as applied to claim 1 and 21. The Examiner rejected claim 11 under 35 U.S.C. 103(a) as being unpatentable over Ohkubo ('526) combined with Goto ('640) as applied to claim 8, further combined with additional teachings in Goto. The Examiner asserted that Goto discloses that compounds (6) to (8) represent formula (I) disclosed at col. 3, lines 20-47. Further, the Examiner asserted that Goto ('640) discloses that both benzene rings in the 9-fluorenylidene group are substituted with the groups X and Y, respectively, where X and Y each can be a substituted amino group, a hydrogen, a halogen, an alkyl, an amino, or an alkoxy. (Col. 3, lines 43-47, and compounds (10) and (12) at col. 5. Hence, the Examiner asserted that the Goto ('640) compounds (6) to (8) meet the substituted 9-fluorenylidene limitation recited in instant claims 4, 11, and 24, when the one of the benzene rings in the 9-fluorenylidene group in the Goto ('640) compounds (6) to (8) is substituted with an alkyl having 1 to 8 carbon atoms or an alkoxy having

1 to 8 carbon atoms, as taught by Goto ('640), and the other benzene ring in the 9-fluorenylidene group in compounds (6) to (8) is substituted with a halogen, such as chlorine or bromide as shown in compounds (10) and (12), or an alkyl, a substituted or unsubstituted amino group, a hydroxyl group, or an alkoxy, as disclosed by Goto ('640).

The rejection is respectfully traversed. Claims 4 and 24 depend from claims 1 and 21, respectively, and therefore incorporate all of the features of the respective independent claims. As discussed above, Goto ('640) does not disclose or suggest all of the elements in independent claims 1 and 21, and therefore does not render claims 1 and 21 prima facie obvious. If an independent claim is nonobvious under 35 U.S.C. 103 then any claim depending therefrom is nonobvious. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988). Claims 4 and 24 which depend from claims 1 and 21, respectively, are therefore also nonobvious. Reconsideration and withdrawal of the rejection of claims 4 and 24 as being unpatentable over Goto ('640) are respectfully requested.

Additionally, the Examiner rejected claim 11 under 35 U.S.C. § 103(a) as being unpatentable over Ohkubo ('526) combined with Goto ('640). Claim 11 depends from independent claim 8 and therefore incorporates all of the features of claim 8. As discussed above, the combination of Ohkubo ('526) and Goto ('640) does not render independent claim 8, prima facie obvious. If an independent claim is nonobvious under 35 U.S.C. 103 then any claim depending therefrom is nonobvious. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988). Therefore, claim 11 which depends from claim 8, is also nonobvious. Reconsideration and withdrawal of the rejection of claim 11 as being unpatentable over Ohkubo ('526) combined with Goto ('640) are respectfully requested.

Claim Rejections Under 35 U.S.C. 103(a) over U.S. Patent No. 6,528,645 to Hamasaki et al. Combined with Goto ('640)

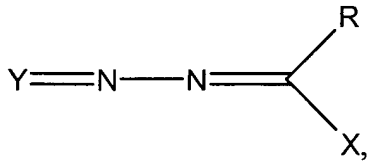
The Examiner rejected claims 1, 5, and 6 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent 6,528,645 to Hamasaki et al. (the '645 patent) combined with Goto ('640). More specifically, the Examiner asserted that the '645 patent "discloses a single-layered organic photoreceptor comprising an electrically conductive substrate and a photosensitive layer comprising particular titanyl phthalocyanine crystals, an electron transferring compound, and a

hole transferring compound." (Col. 3, lines 54-57; and, for example, example 1 at col. 23, lines 65, to col. 24, line 17.) The Examiner also noted that the '645 patent "does not exemplify a single-layered organic photoreceptor comprising the charge transport compound recited in the instant claims." The Examiner asserted that, however, the '645 patent discloses that as the hole, i.e., charge transferring material, "there can be used any of various hole transferring compounds which have conventionally been known," such as hydrazones. (Col. 13, lines 11-13; col. 14, line 3).

The Examiner asserted that Goto (the '640 patent) renders obvious a hydrazone, i.e., an azine charge transport compound that meets the compositional limitations of the formula recited in instant claim 1. Further, the Examiner asserted that it would have been obvious for a person having ordinary skill in the art, in view of the disclosures of Goto ('640), to use the charge transport compound rendered obvious over the teachings of Goto as the hole transferring compound in the single-layered organic photoreceptor disclosed by Hamasaki (the '645 patent).

The rejection is respectfully traversed. The combination of Hamasaki ('645) and Goto ('640) does not render independent claim 1, prima facie obvious. Reconsideration of the rejection based on the following comments is respectfully requested.

As discussed above, compounds (6) to (8) of the '640 patent (Goto) comprise a p-N,N-diphenylaminophenylene group at one end of the compound. Additionally, Formula (I) discloses that X and Y each can be a hydrogen, a halogen, an alkyl (preferably one having 1 to 8, and more preferably, 1 to 4 carbon atoms), and alkoxy (preferably one having 1 to 8, and more preferably 1 to 4 carbon atoms), amino or a substituted amino group. As such, Goto ('640) does not teach or suggest a compound where the X or Y comprises a $-(CH_2)_nH$ group on the 9-fluorenylidene group, and where n is an integer between 1 and 50, and one or more of the methylene groups is optionally replaced by O, ... a CR_cR_d group, or a SiR_eR_f where R_c, R_d, R_e, and R_f are, each independently, a bond, H, a hydroxyl group, a thiol group, a carboxyl group, an amino group, an alkyl group, an alkoxy group, an alkenyl group, a heterocyclic group, an aromatic group, or part of a ring group, but not an alkyl moiety or an alkoxy moiety. As presently claimed in independent claim 1, a charge transport material has the formula



where Y comprises a 9-fluorenylidene group having at least a solubilizing substituent comprising a $-(CH_2)_nH$ group where n is an integer between 1 and 50, and one or more of the methylene groups is optionally replaced by O, ... a CR_cR_d group, or a SiR_eR_f where R_c, R_d, R_e, and R_f are, each independently, a bond, H, a hydroxyl group, a thiol group, a carboxyl group, an amino group, an alkyl group, an alkoxy group, an alkenyl group, a heterocyclic group, an aromatic group, or part of a ring group, however the solubilizing substituent is not an alkyl moiety or an alkoxy moiety.

Additionally, since Hamasaki ('645) alone or in combination with Goto ('640) does not teach or suggest the claimed charge transport materials, Hamasaki ('645) does not make up for the deficiencies of Goto ('640). As such, the combination of Hamasaki ('645) and Goto ('640) does not teach or suggest all of the elements in independent claim 1, and therefore does not render claim 1 prima facie obvious.

Since the combination of Hamasaki ('645) and Goto ('640) does not render claim 1 prima facie obvious, reconsideration and withdrawal of the rejection of claim 1, under 35 U.S.C. § 103(a) as being unpatentable over Hamasaki ('645) combined with Goto ('640) are respectfully requested. If an independent claim is nonobvious under 35 U.S.C. 103 then any claim depending therefrom is nonobvious. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988). Claims 5 and 6 which depend from claim 1 are therefore also nonobvious. Reconsideration and withdrawal of the rejection of claims 1, 5 and 6 as being unpatentable Hamasaki ('645) combined with Goto ('640) are also respectfully requested.

Rejection of Claims Under 35 U.S.C. 103 (a) Over Ohkubo ('526) Combined with Hamasaki ('645) Combined with Goto ('640)

The Examiner rejected claims 7, 8, and 12-14 under U.S.C. 103(a) as being unpatentable over Ohkubo ('526) combined with Hamasaki ('645) and Goto ('640). The Examiner asserted that Ohkubo ('526) discloses an electrophotographic image forming apparatus comprising all the components recited in instant claims 8 and 12-14, but for the particular photoreceptor. Further,

the Examiner asserted that Ohkubo ('526) does not disclose the use of the photoreceptor recited in the instant claims.

The Examiner asserted that Hamasaki ('645) combined with the disclosures of Goto ('640) renders obvious a single-layered organic photoreceptor comprising a photosensitive layer comprising an electrically conductive substrate and a photosensitive layer comprising particular titanyl phthalocyanine crystals, an electron transferring compound, and a hole transferring compound, using the charge transport compound rendered obvious over the teachings of (Goto) '640 as the hole transferring compound. Further, the Examiner asserted that the photoreceptor meets the compositional limitations recited in instant claims 7, 8 and 12-14, and that it would have been obvious to use the photosensitive layer rendered obvious over the combined teachings of Hamasaki ('645) and Goto ('640) as the photosensitive layer on the conductive drum in the apparatus disclosed by Ohkubo ('526).

The rejection is respectfully traversed. As discussed above, Goto ('640) does not disclose or suggest all of the elements as presently claimed in independent claims 1 and 8. Additionally, neither Ohkubo ('526) nor Hamasaki ('645) alone or in combination with Goto ('640) disclose or suggest the claimed charge transport materials, and thus do not make up for the deficiencies of Goto ('640). Therefore, Ohkubo ('526) combined with Hamasaki ('645) and Goto ('640) does not render independent claims 1 and 8, prima facie obvious. If an independent claim is nonobvious under 35 U.S.C. 103 then any claim depending therefrom is nonobvious. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988). Claims 7-9 and 12-14 depend from claim 1 and claim 8 respectively and therefore are also nonobvious. Reconsideration and withdrawal of the rejection of claims 7-9 and 12-14 under 35 U.S.C. § 103(a) as being unpatentable over Ohkubo ('526) combined with Hamasaki ('645) and Goto ('640) are respectfully requested.

Applicants do not comment further on specific features of the dependent claims, but do not acquiesce to the assertions in the Office Action, since these issues are presently moot in light of the above analysis.

Conclusion

In view of the foregoing, it is submitted that this application is in condition for allowance. Favorable consideration and prompt allowance of the application are respectfully requested.

The Examiner is invited to telephone the undersigned if the Examiner believes it would be useful to advance prosecution.

Respectfully submitted,

Paul B. Savereide
Registration No. 36,914

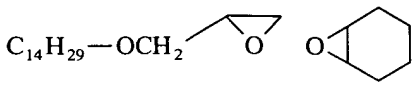
Customer No. 24113
Patterson, Thuente, Skaar & Christensen, P.A.
4800 IDS Center
80 South 8th Street
Minneapolis, Minnesota 55402-2100
Telephone: (612) 252-1550

ATTACHMENT 1

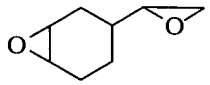
Table 5-9 Continued

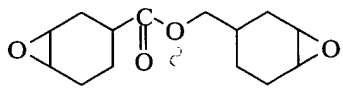
Epoxides

Monofunctional

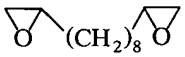


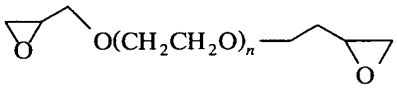
Difunctional





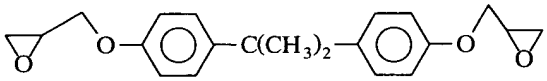
(Cyracure UVR 6110)
(Ciba Geigy CY 179)
(Degussa K 126)





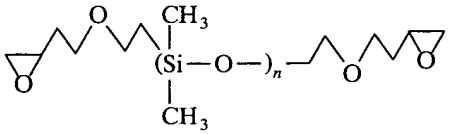
(Ciba Geigy DY 0265P)

Oligomers



(Ciba Geigy GY 250)

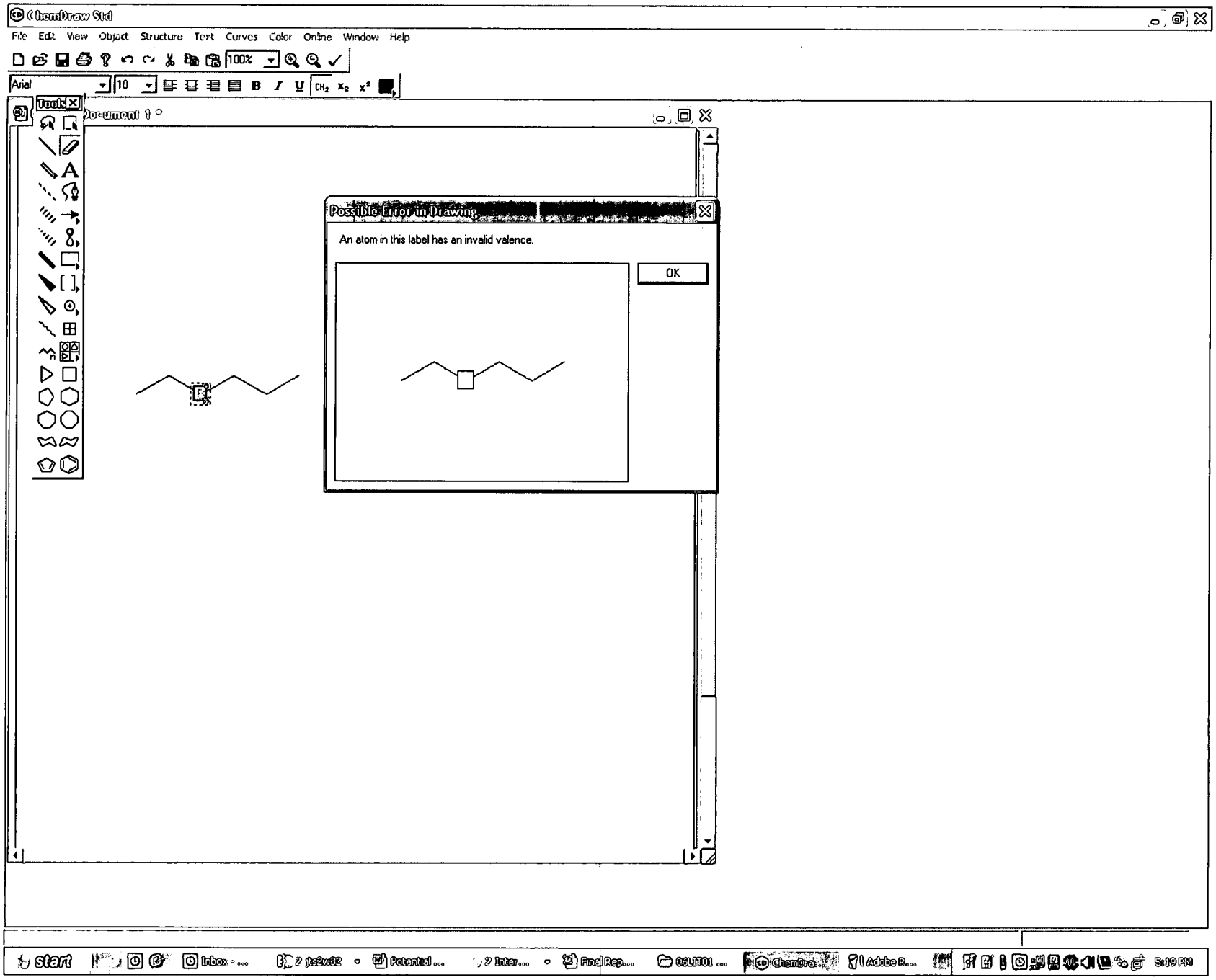
$-CH=CH_2$



VE

Epoxide triglyceride oils (derived from linseed, meadow foam, sunflower, soybean, vernonia)

ATTACHMENT 2



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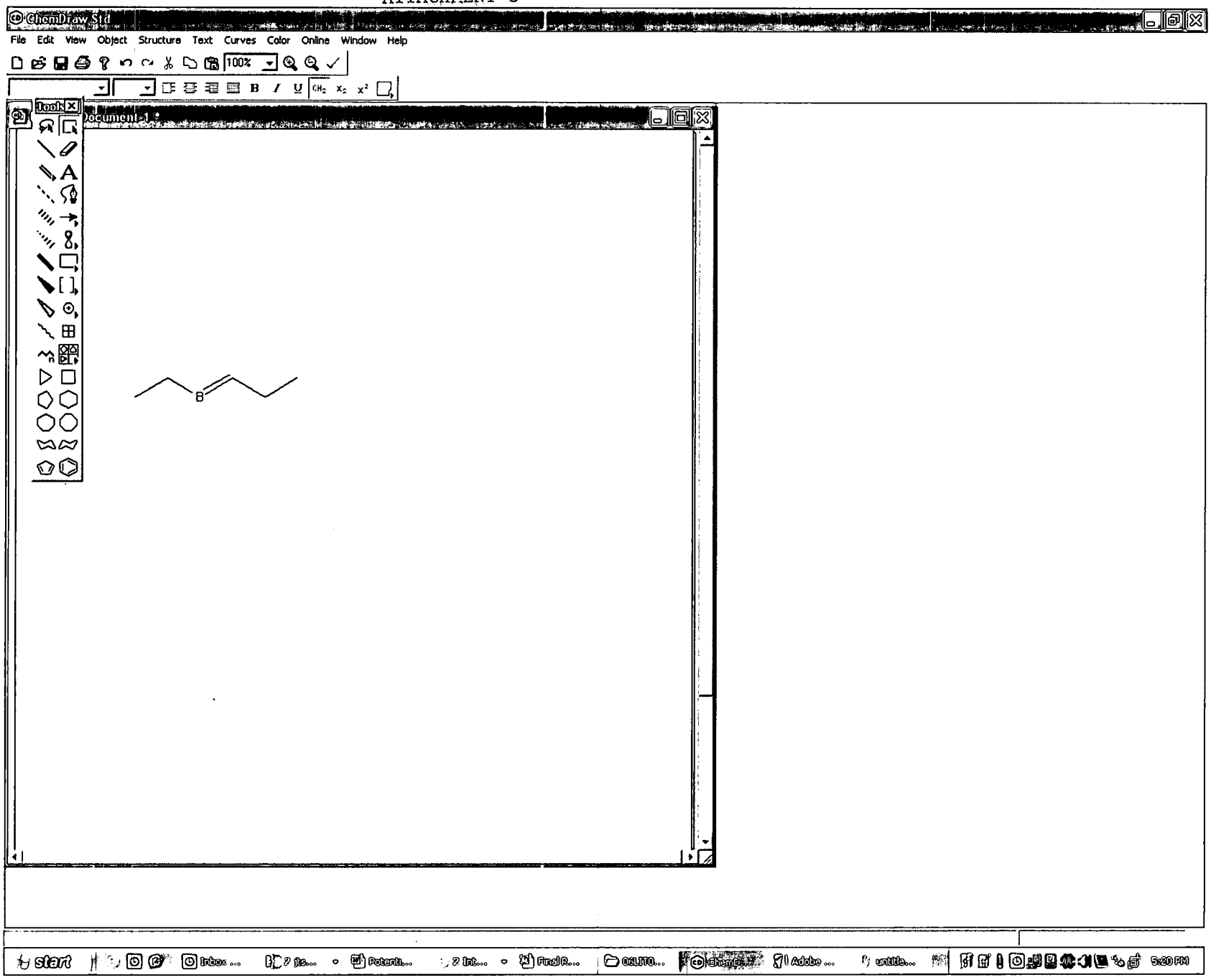

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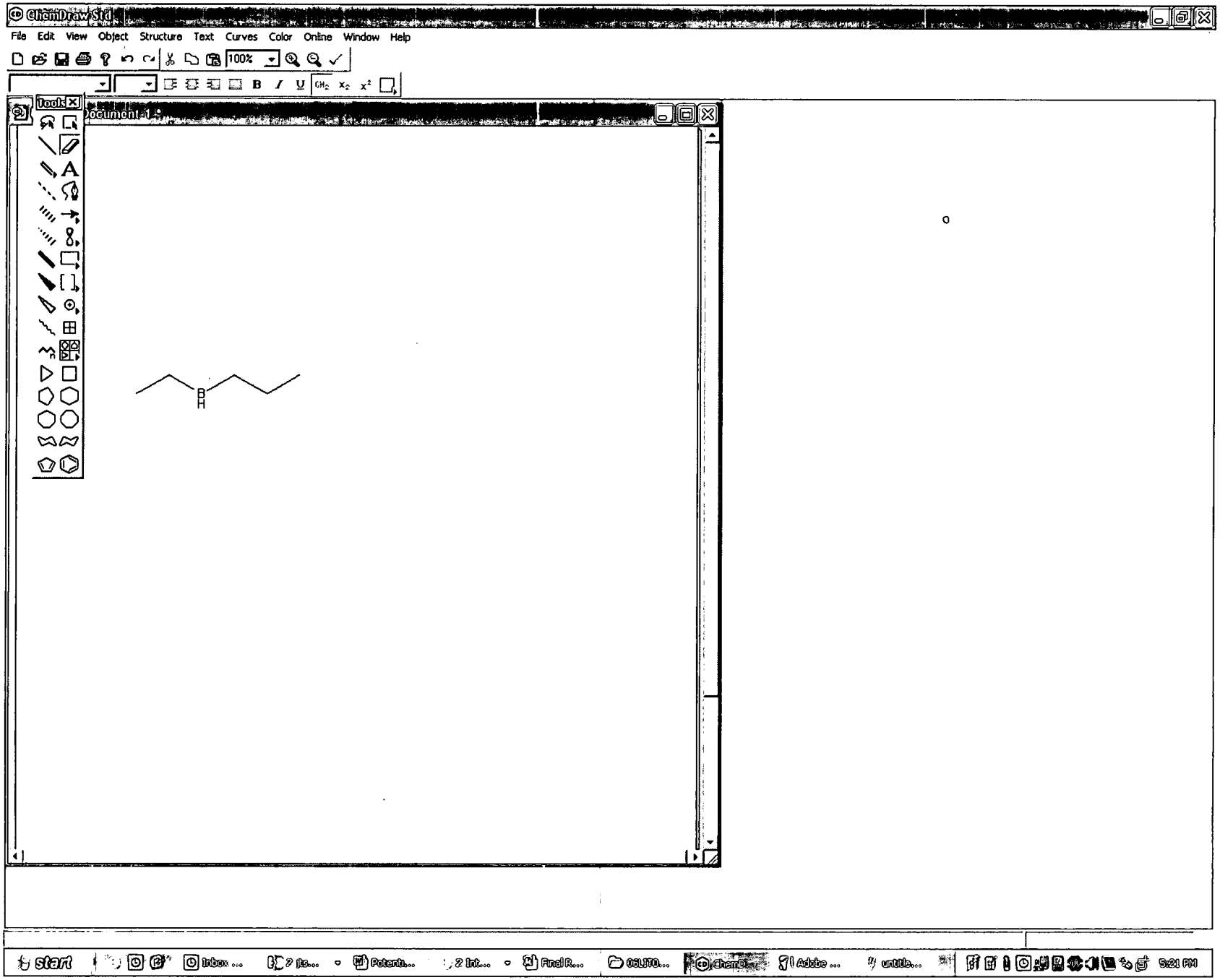

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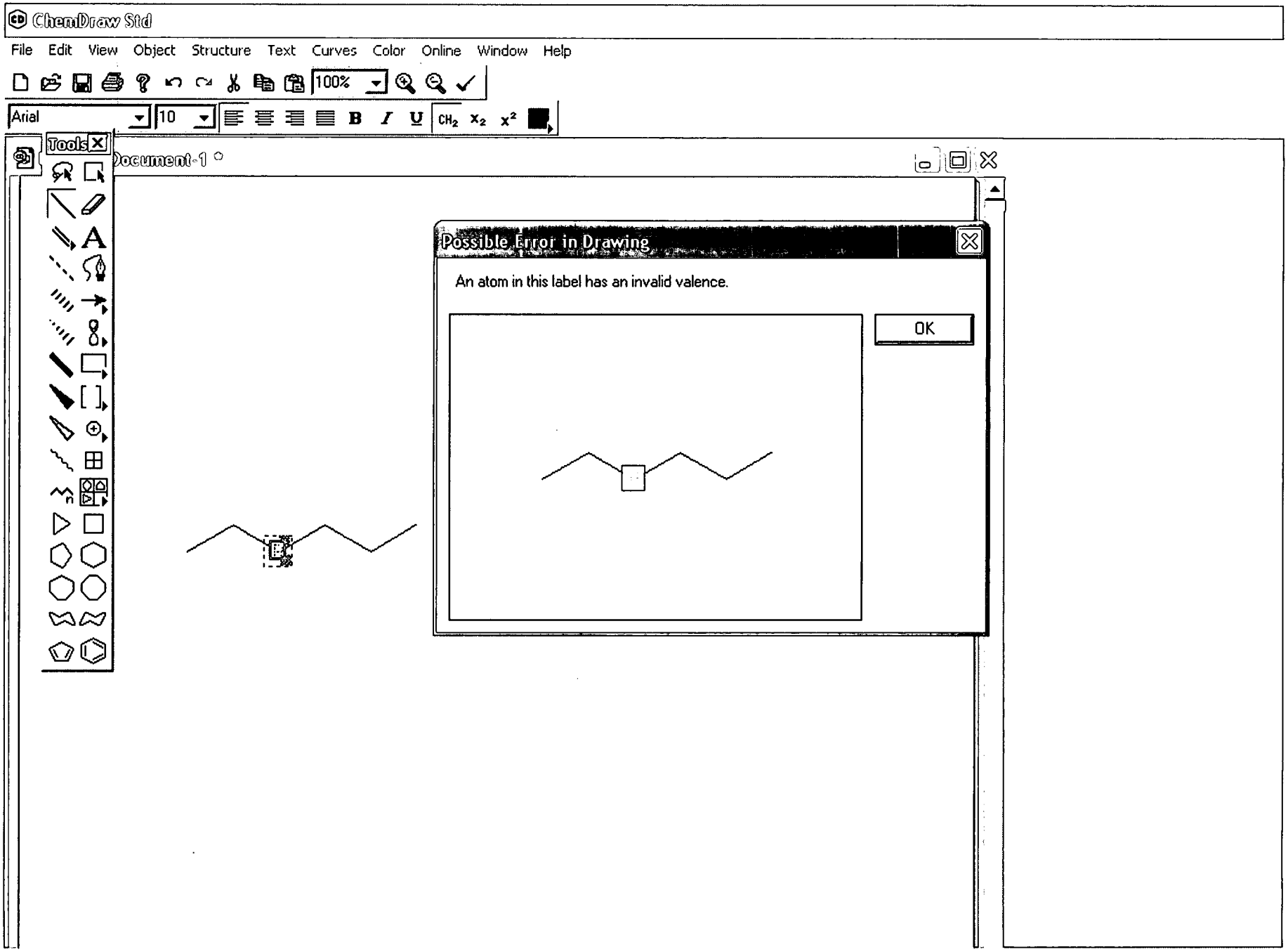

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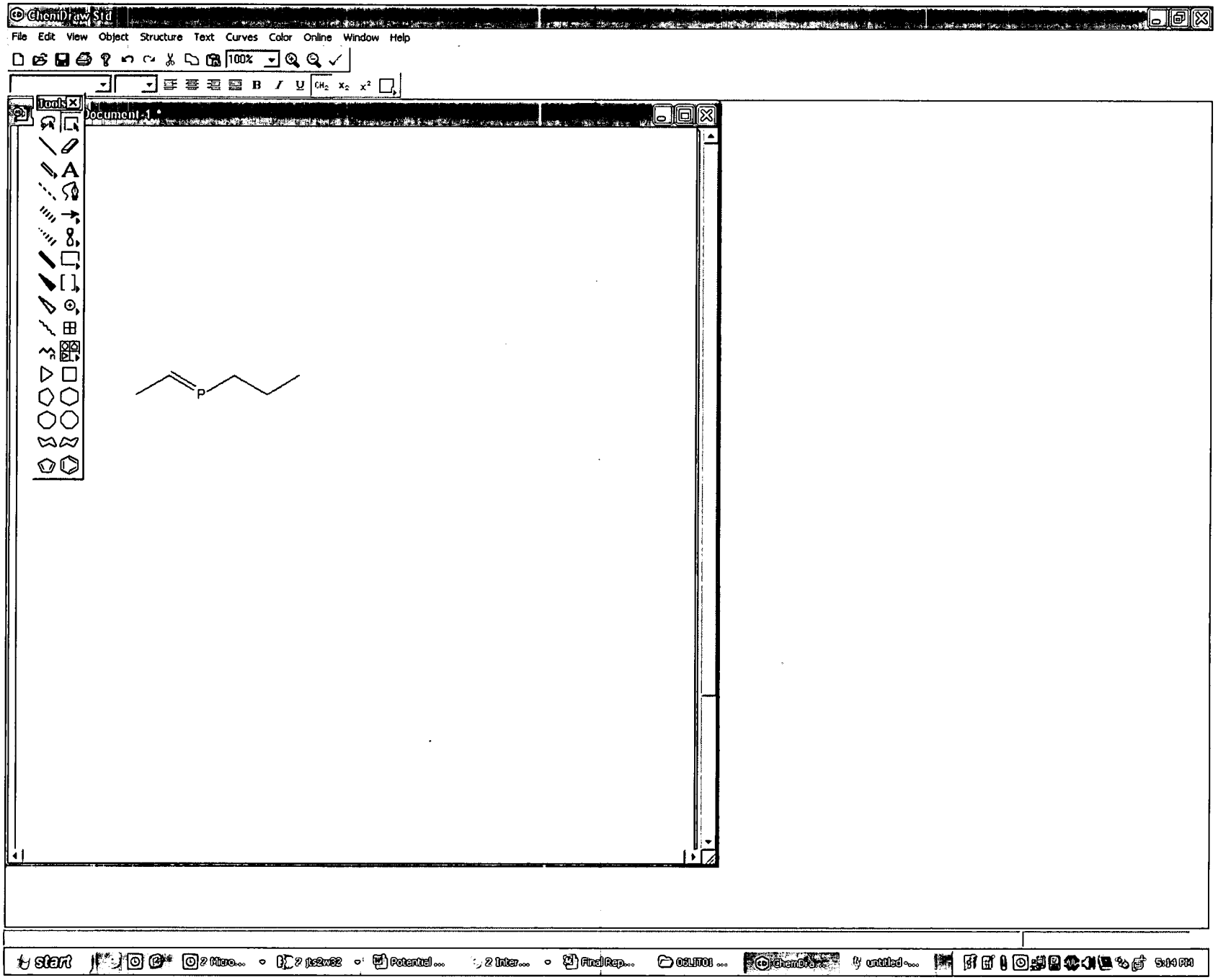

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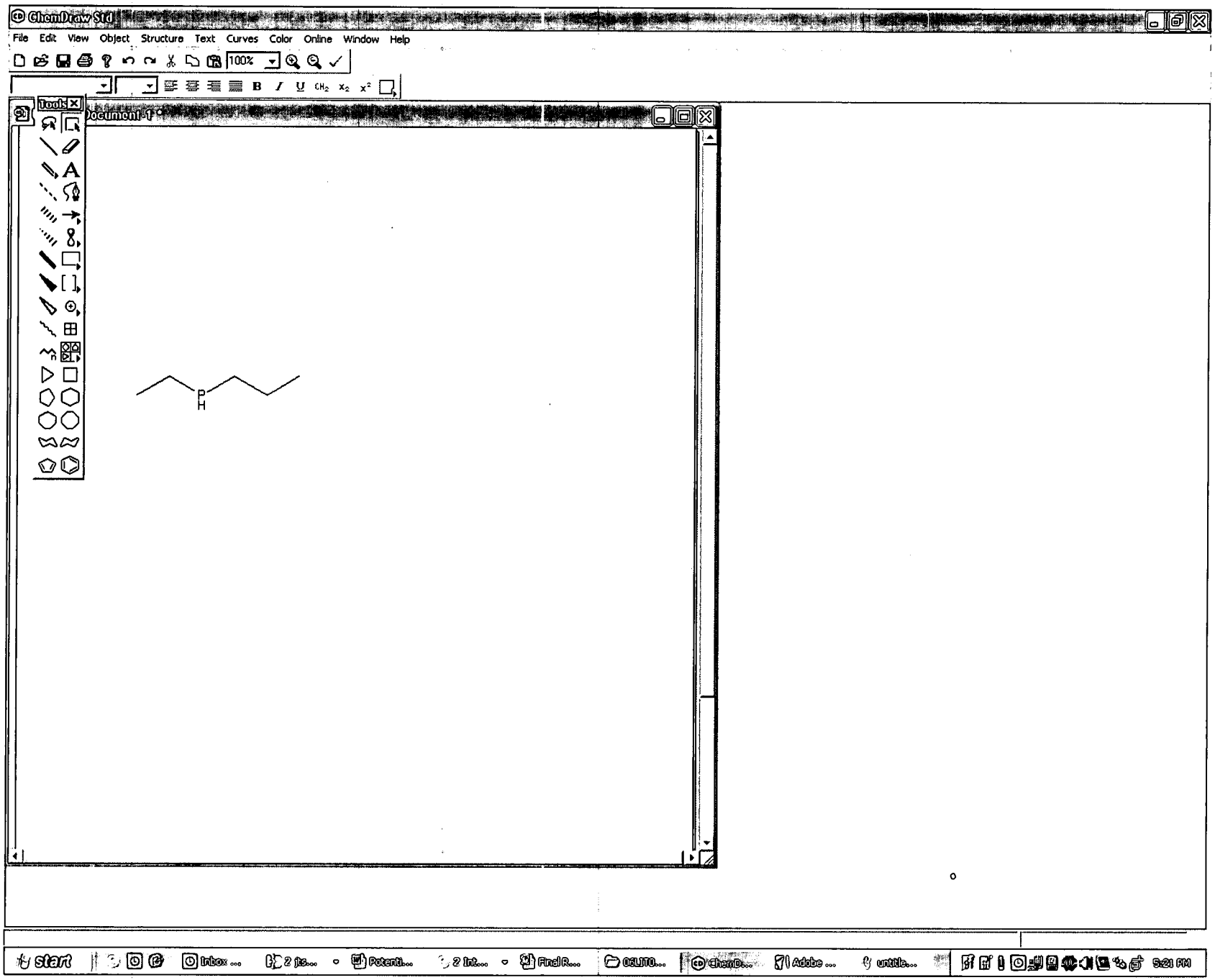

ATTACHMENT 8